

WHAT IS CLAIMED IS:

1 1. A method, performed by a processor in a portable digital music player,
2 for filing audio tracks stored on a computer readable media, with each audio track having
3 metadata associated therewith including category value data for naming attributes of the track
4 and type data indicating the type of track, said method comprising the acts of:
5 reading a definition file that defines an ordered hierarchical tree structure, with
6 the file including category names for naming the branch under which tracks are sorted, track
7 type information specifying which type of tracks are to be sorted under the branch, and
8 structure information defining how to file tracks based on associated metadata;
9 for each track, iteratively determining, base on metadata describing the track,
10 if the track belongs in the branch, and, for each branch in which the track belongs, traversing
11 the branch to determine the appropriate location to file the track.

1 2. The method of claim 1, where said act of searching further comprises
2 the acts of:
3 utilizing track type information to file only tracks of a specified type under a
4 particular branch.

1 3. The method of claim 1 further comprising the acts of:
2 for each branch, utilizing category structure information to file tracks in a
3 specified attribute order.

1 4. The method of claim 1, where said portable digital music player
2 includes a display screen and a user interface for interacting with the display, further
3 comprising the acts of:
4 displaying the categories and subcategories on the display in a hierarchical
5 order;
6 displaying all names of tracks associated with a category or sub-category
7 when a user utilizes the interface to select a category or sub-category;

8 utilizing the pointer to access and play a track when a user selects a track
9 name through the user interface. and
10 utilizing the pointer to access and play a collection of tracks within a category
11 or subcategory when a user selects a category or subcategory through the user interface.

1 5. A method, implemented by a processor in a portable digital music
2 player, for associating metadata with audio tracks comprising the acts of:
3 opening a formatted file for each track comprising a file data portion and a file
4 attributes portion, with the file attributes portion including a plurality of fields corresponding
5 to category types and file types;
6 storing an unmodified audio track in the file data portion of the formatted file;
7 and
8 storing category type and file type information about the unmodified track in
9 corresponding fields.

1 6. A method, performed by a processor in a portable digital music player,
2 for filing audio tracks, stored on a computer readable media, under categories in an in-
3 memory tree structure, with each audio track having metadata associated therewith including
4 category name data for naming, said method comprising the acts of:
5 upon startup or when a track is added or changed, searching the metadata of
6 each track; and
7 for each track, automatically filing the track by category name under each
8 selected category to form a hierarchical track filing scheme.

1 7. The method of claim 6 further comprising the act of:
2 selecting the categories to be the Album including the track, the title of the
3 track, and the name of the artist that recorded the track.

1 8. The method of claim 6, where said portable digital music player
2 includes a display screen and a user interface for interacting with the display, further
3 comprising the acts of:
4 displaying the categories on the display in a hierarchical order;
5 displaying all names of tracks associated with a category when a user utilizes
6 the interface to select a category ;
7 accessing and playing a track when a user selects a track name through the
8 user interface. and
9 accessing and playing a collection of tracks within a category when a user
10 selects a category through the user interface.

1 9. A computer program product comprising:
2 a computer readable medium having program code embodied therein for filing
3 audio tracks stored on a computer readable media, with each audio track having metadata
4 associated therewith including category value data for naming attributes of the track and type
5 data indicating the type of track, said program code comprising:
6 program code, executed by a processor, for reading a definition file that
7 defines an ordered hierarchical tree structure, with the file including category names for
8 naming the branch under which tracks are sorted, track type information specifying which
9 type of tracks are to be sorted under the branch, and structure information defining how to
10 file tracks based on associated metadata;
11 program code, executed by a processor, for each track, for iteratively
12 determining, base on metadata describing the track, if the track belongs in the branch, and,
13 for each branch in which the track belongs, traversing the branch to determine the appropriate
14 location to file the track.

1 10. A computer program product comprising:
2 a computer readable medium for having program code embodied therein for
3 filing audio tracks, stored on a computer readable media, under categories in an in-memory
4 tree structure, with each audio track having metadata associated therewith including category
5 name data for naming, said program code comprising:

6 program code, executed by a processor, upon startup or when a track is added
7 or changed, for searching the metadata of each track; and
8 program code, executed by a processor, for each track, for automatically filing
9 the track by category name under each selected category to form a hierarchical track filing
10 scheme.